

Appl. No. 09/943,822
Amdt. dated August 24, 2005
Reply to Office action of June 17, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of transferring data between a computer and a non-volatile storage device, both said computer and said storage device coupled to a network, comprising:
 - (a) encrypting the data;
 - (b) transmitting the encrypted data across a network to the storage device; and
 - (c) storing the encrypted data on the storage device;
 - (d) retrieving the encrypted data from the storage device;
 - (e) the storage device encrypting the retrieved encrypted data with a pre-determined key to produce twice encrypted data; and
 - (f) transmitting the twice encrypted data to the computer.
2. (Original) The method of claim 1 wherein (b) also includes creating a header containing destination information pertaining to the storage device and transmitting the encrypted data in conjunction with the header.
3. (Original) The method of claim 2 wherein the header or footer contains cryptographic metrics on the data.
4. (Original) The method of claim 2 wherein (c) includes removing the header before storing the encrypted data on the storage device.
5. (Original) The method of claim 4 wherein the header or footer contains cryptographic metrics for the data and using said metrics to validate the integrity/authenticity of the data prior to storing the encrypted data on the storage device.

Appl. No. 09/943,822
Amdt. dated August 24, 2005
Reply to Office action of June 17, 2005

6. (Canceled).

7. (Original) The method of claim 6 further including receiving the encrypted data at the computer and decrypting the encrypted data received by the computer.

8. (Canceled).

9. (Canceled).

10. (Currently amended) The method of claim ~~[[9]]~~ 1 further including twice decrypting the twice encrypted data received by the computer.

11. (Currently amended) A method of transferring data between a computer and a nonvolatile storage device, both said computer and said storage device coupled to a network, comprising:

- (a) retrieving encrypted data from the storage device;
- (a1) encrypting said retrieved encrypted data to produce twice encrypted data;
- (b) transmitting the twice encrypted data across a network from the storage device to the computer; and
- (c) receiving the twice encrypted data at the computer;
- (d) twice decrypting the twice encrypted data received in (c) to recover said data.

12. (Original) The method of claim 11 wherein (b) also includes creating a header containing destination information pertaining to the computer and transmitting the encrypted data in conjunction with the header.

13. (Original) The method of claim 11 further including removing the header before decrypting the encrypted data received in (c).

Appl. No. 09/943,822
Amdt. dated August 24, 2005
Reply to Office action of June 17, 2005

14. (Original) The method of claim 11 further including:
- (e) encrypting data by a computer;
 - (f) transmitting the encrypted data from the computer across a network to the storage device; and
 - (g) storing the encrypted data on the storage device.
15. (Original) The method of claim 14 wherein (f) also includes creating a header containing destination information pertaining to the storage device and transmitting the encrypted data in conjunction with the header.
16. (Original) The method of claim 15 wherein (g) includes removing the header before storing the encrypted data on the storage device.
17. (Canceled).
18. (Canceled).
19. (Currently amended) A computer system, comprising:
a computer; and
a nonvolatile storage device external to said computer and coupled to said computer over a network;
wherein said computer sends encrypted data to said storage device over said network and said storage device stores the data in encrypted form; and
wherein said storage device retrieves encrypted data from storage therein, encrypts said encrypted data to produce twice encrypted data, and transmits the twice encrypted data to the computer.
20. (Original) The computer system of claim 19 wherein said computer sends said encrypted data to said storage device with a header that contains destination information pertaining to the storage device.

Appl. No. 09/943,822
Amdt. dated August 24, 2005
Reply to Office action of June 17, 2005

21. (Original) The computer system of claim 20 wherein said storage device removes the header before storing the encrypted data.

22. (Canceled).

23. (Canceled).

24. (Currently amended) The computer system of claim ~~22~~19 wherein said storage device transmits said twice encrypted with a header that provides routing information pertaining to the computer.

25. (Canceled).

26. (Currently amended) The computer system of claim ~~25~~19 wherein said computer twice decrypts the twice encrypted data transmitted to the computer by the storage device.

27. (Currently amended) A computer system, comprising:
a computer; and
a nonvolatile storage device external to said computer and coupled to said computer over a network;
wherein said storage device retrieves encrypted data stored therein,
encrypts said encrypted data to produce twice encrypted data,
transmits the twice encrypted data across the network to said computer wherein the computer receives and twice decrypts the twice encrypted data to recover the data.

28. (Currently amended) The computer system of claim 27 wherein said storage device creates a header containing destination information pertaining to the computer and transmits the twice encrypted data with the header to the computer.

Appl. No. 09/943,822
Amdt. dated August 24, 2005
Reply to Office action of June 17, 2005

29. (Currently amended) The computer system of claim 28 wherein said computer removes the header before decrypting the twice encrypted data received from the storage device.

30. (Original) The computer system of claim 27 wherein said computer encrypts data and transmits said encrypted data to said storage device where said encrypted data is stored.

31. (Original) The computer system of claim 30 wherein said computer creates a header containing destination information pertaining to the storage device and transmits the encrypted data with the header to the storage device.

32. (Original) The computer system of claim 31 wherein the storage device removes the header before storing the encrypted data.

33. (Canceled).

34. (Canceled).

35. (Currently amended) A method of transferring data between a computer and a non-volatile storage device, both said computer and said storage device coupled to a network, comprising:

- (a) issuing a transmission command for data;
- (b) encrypting the data as part of the transmission process;
- (c) transmitting the encrypted data across a network to the storage device; and
- (d) storing the encrypted data on the storage device;
- (e) retrieving the encrypted data from the storage device;
- (f) encrypting the retrieved encrypted data to generate twice encrypted data; and
- (g) transmitting said twice encrypted data across said network.

Appl. No. 09/943,822
Amdt. dated August 24, 2005
Reply to Office action of June 17, 2005

36. (Currently amended) The method of claim 35 wherein ([a] b) includes encrypting the data with a dynamically generated session key.

37. (Currently amended) The method of claim 36 further including retrieving ~~the encrypted data from the storage device, transmitting said encrypted data to the computer, and decrypting the~~ twice encrypted data using said session key.